

REMARKS

Claims 1, 8-11, and 24-43 are pending in this application. Claims 1, 8-11, and 24-33 are amended. Claims 2-7 and 12-23 are canceled. Claims 34-43 are new.

Claim Rejections under 35 U.S.C. § 101

The Examiner rejects claims 1, 3, 24 and 29 under 35 U.S.C. § 101 alleging they are directed to non-statutory subject matter. The Applicants respectfully traverse.

The Examiner, on pages 2 and 3 of the Office Action, asserts that claims 1, 3, and 24 recite an “intended use” of the data structure “for managing reproduction of graphic data by a reproducing apparatus.” The Examiner additionally argues that the body of claim 1 does not have any step to perform the management of the “graphic data.” Therefore, the Examiner asserts that, although claim 1 is directed to “a computer readable medium storing a data structure,” the claim does not define structural and functional interrelationships between the data structure and the computer software and hardware components. Therefore, the Examiner asserts the claim does not permit the functionality of the computer readable medium to be realized. Although the Applicants do not agree with the Examiner on this point, claim 1 is amended in order to more clearly overcome the alleged deficiency and advance prosecution.

As stated in the previous response, “[a] computer readable medium storing a data structure for managing reproduction of graphic data by a reproducing apparatus,” as recited in claim 1, is clearly statutory subject matter as explained in MPEP § 2106.01. In detail, MPEP § 2106.01 states:

When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare In re Lowry, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (discussing patentable weight of data structure limitations in the context of a statutory claim to a data structure stored on a computer readable medium that increases computer efficiency) and Warmerdam, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory).

Functional descriptive material recorded on a computer readable medium, therefore, is statutory. With respect to functional descriptive material, the Applicants also note that MPEP § 2106.01 states:

In this context, “functional descriptive material” consists of **data structures** and computer programs **which impart functionality when employed as a computer component.** (The definition of “data structure” is “a physical or logical relationship among data elements, designed to support specific data manipulation functions.” The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) “Nonfunctional descriptive material” includes but is not limited music, literary works and a compilation or mere arrangement of data.

(emphasis added)

Therefore, a data structure which imparts functionality when employed as a computer component is an example of functional descriptive material, per MPEP § 2106.01. The Applicants emphasize that the data structure recited in claim 1 is used for “managing reproduction of graphic data by a reproducing apparatus,” therefore, claim 1’s data structure, in the words of MPEP § 2106.01 “imparts functionality when employed as a computer component.” Accordingly, the Applicants submit claim 1’s data structure is functional descriptive material.

Because the functional descriptive material recorded on a computer-readable medium is statutory (per MPEP § 2106.01), and because claim 1’s data structure is functional descriptive material (per MPEP § 2106.01), the Applicants submit “[a] computer readable medium storing a data structure for managing reproduction of graphic data by a reproducing apparatus,” as recited in claim 1, is clearly statutory subject matter.

Additionally, the Applicants direct the Examiner to “Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility,” Annex IV(a), page 52, which states:

A claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure’s functionality to be realized and **is thus statutory.**

Accordingly, the “Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility” clearly recognize that computer-readable mediums encoded with a data structure are statutory.

With regard to the Examiner’s assertion that the claim does not permit the functionality of the computer readable medium to be realized, the Applicants point out that claim 1, as amended, recites a data structure including “at least one transport packet in the one or more graphic segments includes **position information defining a position for the reproducing apparatus to display the graphic image.**” In other words, the data structure recorded on the computer readable medium may cooperate with and enable a reproducing apparatus to properly position a graphic image. Therefore, claim 1’s data structure does permit the functionality of the computer readable medium to be realized. For at least the above reasons, the Applicants submit the data structure recited in claim 1 is statutory.

For at least the reasons given above, the Applicants respectfully request the rejection of claims 1, 3, 24, and 29 under 35 U.S.C. § 101 as being drawn to non-statutory subject matter be withdrawn.

Claim Rejections Under 35 U.S.C. § 102

Claims 1, 3, 8, 9, 10, 11, 13, 16, 19, 22, and 29-33 are rejected under 35 U.S.C. §102(b) as being unpatentable over Okada et al (USP 6,445,877 B1). The Applicants respectfully traverse.

Initially, the Applicants note that independent claim 1 is amended to recite “a graphic image for overlay on main video data.” Additionally, claim 1 is also amended to recite “the transport packets in the one or more graphic segments have a same packet identifier (PID).” The Applicants submit at least the above features distinguish claim 1 from Okada for at least the reasons set forth below.

Okada discloses a video stream which includes I-pictures, B-pictures, and P-pictures. The I-pictures, B-pictures, and P-pictures are differentiated or determined according to their image compression strategy. The I-picture is a self-reproducible picture, the B and P-pictures are not. As shown in FIGS. 5, 13F, and 14D, the I-pictures, B-pictures, and P-pictures are non-overlapping pictures in a video stream. That is, each picture is sequentially displayed. Accordingly, even if Okada’s I, B, and P-pictures are considered graphic images, none constitute “a graphic image for overlay

on main video data,” as recited in claim 1. Accordingly, Okada fails to anticipate at least this feature of claim 1.

Even if Okada did disclose “a graphic image for overlay on main video data,” (which is not admitted), the Applicants submit Okada still fails to anticipate claim 1 because Okada fails to disclose, at least, “the transport packets in the one or more graphic segments have a same packet identifier (PID).”

The Examiner, on page 4 of the Office Action, alleges that Okada’s I-picture FLAG data reads on the “PID” recited in the independent claims. However, Okada’s I-FLAG indicates whether an I-picture exists in a corresponding block, whereas PID information is used for identifying or differentiating transport packets associated with specific data from transport packets associated with other data. Accordingly, the Applicants submit one skilled in the art would not equate Okada’s I-picture FLAG with claim 1’s PID information. Additionally, Okada does not disclose or teach that transport packets contained in a corresponding block have the same PID information, accordingly, the Applicants submit Okada cannot be relied on for disclosing “the transport packets in the one or more graphic segments have a same packet identifier (PID),” as recited in claim 1.

For at least the reasons given above, the Applicants respectfully request the rejection of claim 1, and all claims which depend thereon, under 35 U.S.C. § 102(b) as being anticipated by Okada be withdrawn.

For somewhat similar reasons, the Applicants respectfully request the rejection of claims 8-11, and all claims which depend thereon, under 35 U.S.C. § 102(b) as being anticipated by Okada be withdrawn.

Claim Rejections Under 35 U.S.C. § 103

Claims 24-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada as applied to claims 1, 3, 8, 9, 10, 11, 13, 16, 19, 22, 29-33, and further in view of Kikuchi et al. (US 6,553,180 B1).

The Applicants submit claim 1 is nonobvious over the combination of Okada and Kikuchi at least because neither reference, alone or in combination, teach, suggest, or disclose, “...the one or more graphic segments includes position information defining a position for the reproducing apparatus to display the graphic image.”

With regard to Okada, the Examiner admits, on page 5, of the Office Action dated 11/12/2008, that Okada fails to teach graphic information that includes position

information for displaying graphic images, accordingly, the Applicants submit Okada cannot be relied on for teaching, suggesting, or disclosing "...the one or more graphic segments includes position information defining a position for the reproducing apparatus to display the graphic image," as recited in claim 1.

With regard to Kikuchi, the Applicants note that Kikuchi's position information is disclosed as being in the PCGI, but does not disclose or suggest that the PCGI exists in "a graphic segment." Accordingly, the Applicants submit Kikuchi cannot be relied on for disclosing "...the one or more **graphic segments** includes position information defining a position for the reproducing apparatus to display the graphic image," as recited in claim 1.

Because neither Okada nor Kikuchi disclose, teach, or suggest "the one or more graphic segments includes position information defining a position to display the graphic image," as recited in claim 1, the Applicants submit the combination and Okada and Kikuchi can not render the above feature obvious.

Additionally, the Applicants submit that neither Okada nor Kikuchi teach, suggest, or disclose "...one or more graphic segments containing a graphic image for overlay on main video data, the one or more graphic segments multiplexed into a main video stream including the main video data, wherein...at least one transport packet in the one or more graphic segments includes position information defining a position for the reproducing apparatus to display the graphic image," as recited in claim 1. Because neither reference discloses the above features, the Applicants submit the combination cannot render the above features obvious.

For at least the reasons provided above, the Applicants submit claim 1 is nonobvious over Okada in view of Kikuchi. For somewhat similar reasons, the Applicants submit claims 8-11 are likewise nonobvious. Accordingly, the Applicants submit claims 24-28 are nonobvious at least by virtue of their dependence on their respective base claims.

For at least the reasons given above, the Applicants respectfully request the rejection of 24-28 under 35 U.S.C. § 103 as being obvious over Okada in view of Kikuchi be withdrawn.

New Claims

Claims 34-43 are new and are considered patentable at least by virtue of their dependency upon their allowable base claims.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the objections and rejections and allowance of each of claims 1 , 8-11, and 24-43 in connection with the present application is earnestly solicited.

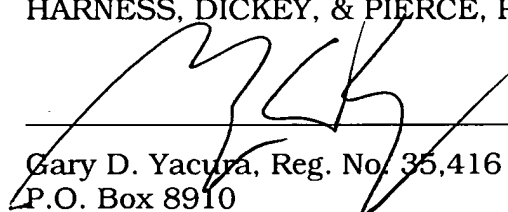
Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Gary D. Yacura at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. §1.17; particularly, extension of time fees.

Respectfully submitted,

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By



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